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ABSTRACT

Six teachers from small and rural schools throughout the Northeast were selected as the 1990-91 Laboratory Fellows by the Regional Laboratory for Educational Improvement of the Northeast and Islands. These teachers were chosen for their exceptional strategies for incorporating multilevel grouping in their classrooms, grades 6-12. This publication profiles these teachers and includes highlights of their educational background, philosophy and goals. The profiles also summarize the teachers' ideas, strategies, sample lessons, and programs that have enabled them to create multilevel groupings within their classrooms. (ALL)

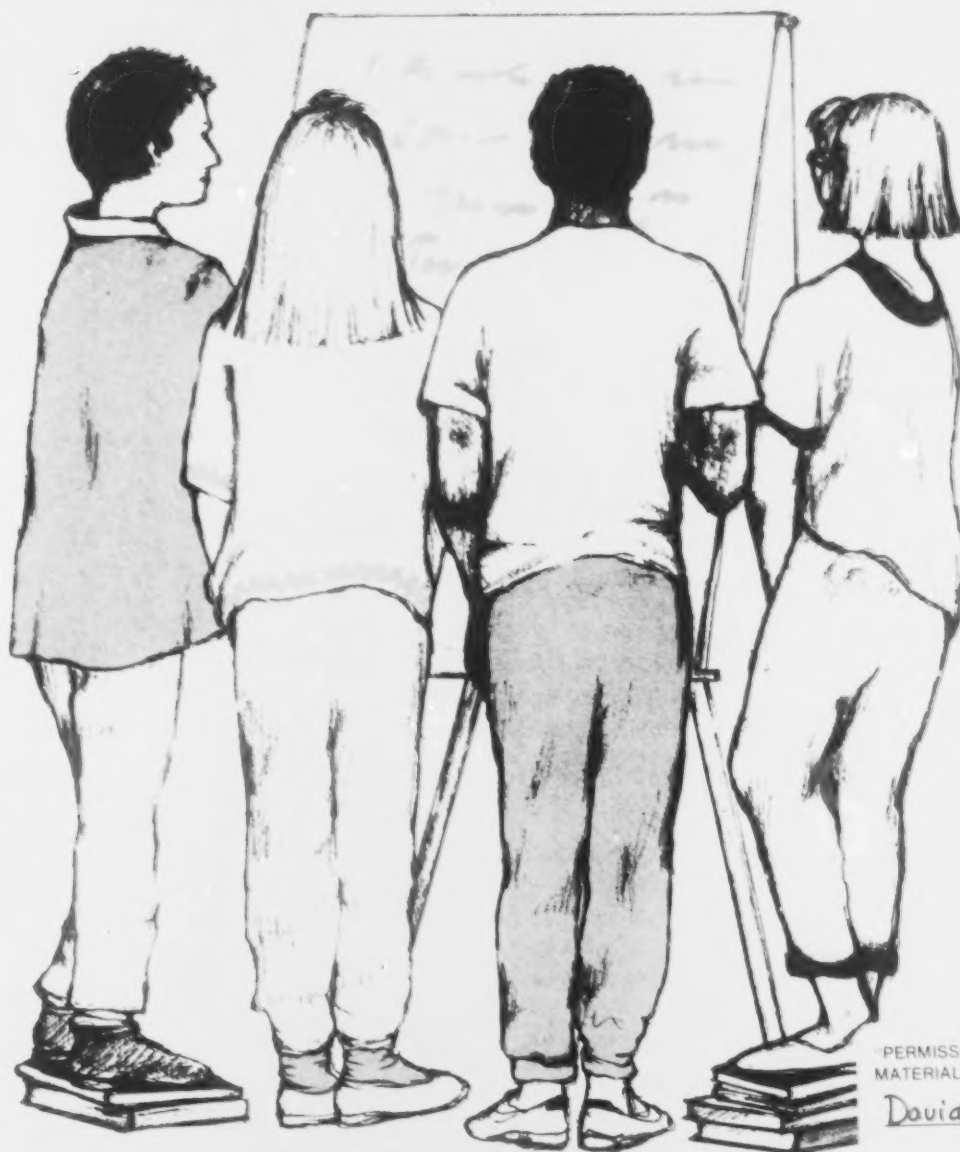
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Outstanding Teaching Practice Series, Volume 3

MULTILEVEL GROUPING, Grades 6-12 Small and Rural Schools



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Outstanding Teaching Practices Series, Volume 3

MULTILEVEL GROUPING, Grades 6-12
Small and Rural Schools

**1990-1991 Laboratory Fellows
Teacher Recognition Program
A Project of the Small Schools Network**

The Regional Laboratory for Educational Improvement of the Northeast and Islands

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"No single profession contributes more to human progress than teaching. Teachers have the unique opportunity to affect not only the children they teach, but those children's children. To this almost frightening responsibility, enormous skill, perception, and wit must be addressed. Occasionally a teacher appears who is able to meet that challenge in a way that inspires and redeems us all."

With these words Raymond J. Gerson, superintendent of the Dobbs Ferry (NY) Union Free School District supported the nomination of a teacher from his district to be considered for the honor of Regional Laboratory Fellow.

Each year, The Regional Laboratory's Teacher Recognition Program honors those teachers who are "able to meet [the] challenge." This year, the program sought exceptional teachers who incorporate multilevel grouping strategies into their classrooms. In addition to the title of 1990-1991 Laboratory Fellow, each honoree receives a \$500 honorarium.

Nominations for the Teacher Recognition Program came from central office and building level administrators, other teachers, and members of educational organizations. Nominees then submitted to the Selection Committee *portfolios of achievement* that speak of their educational background and philosophy, goals, and programs or projects. Selections were made based on the contents of those portfolios. This volume of the Outstanding Teaching Practices Series offers a short profile of each Fellow as well as excerpts from each Fellow's portfolio. Additionally listed in this volume are 1990-1991 Finalists -- 12 teachers whose valuable practices also deserve acknowledgment.

The Teacher Recognition Program began in 1988 as a program to honor teachers in small and rural schools and is conducted through The Laboratory's Small Schools Network.

INTRODUCTION

From my perspective, multilevel grouping in a cooperative classroom has proven to be a very exciting way to teach. The personalities, strengths and weaknesses of individual students emerge and all students grow in the process. The direct teaching of social skills helps students learn how to interact with each other, appreciate their differences and help each other learn more. . . . Project-based, student-centered activity with heterogeneous grouping, in a cooperative setting, helps all students in the classroom learn more, learn better, learn faster, and enjoy the process.

Sheryl Peterson

Across the nation educators are beginning to reorganize and rethink traditional classroom grouping patterns. Teachers are turning to multilevel grouping, peer tutoring, cooperative learning, and other methods that allow them to enable all types of students to realize their learning potential. Much of the recent educational literature and research encourages this shift away from academic tracking, stressing the importance of providing a school environment that prepares *all* students to live and work in an increasingly diverse, complex, and global society.

This society demands that students of all abilities be able to inquire, confront, analyze, express opinions, receive feedback, resolve conflicts, and learn together. David Johnson and Roger Johnson, leading researchers in the field of cooperative learning, explain that "when students work in multi-ability groups, when they are engaged in discussing material and explaining it to each other . . . achievement goes up for high, medium, and low students . . . and the work reflects a higher level of processing, a deeper level of understanding, of critical thinking and long-term retention."

In *Multilevel Grouping, Grades 6-12*, six teachers from small and rural schools throughout the Northeast share ideas and strategies that have worked for them in creating multilevel groups within their classes. Many already actively disseminate their innovative practices with colleagues and college students preparing to teach. It is their hope that you, the reader, will also benefit from their work and ideas.

As you read each profile, consider that these teachers are risk takers, innovators, and deep believers that all children can learn. Referred to as "titans" by one school superintendent, they offer their approaches as fodder for discussion and as points of departure for reflecting on the needs of our children, schools, and society in the 21st century.

Their addresses and phone numbers are listed in the acknowledgement that they want to continue the discussion. We hope you will contact them, and that through their pioneering work, classrooms in which all students "learn more, learn better, learn faster, and enjoy the process" become a regular part of all our schools.

CARYL ADAMOWITCH-LAPORTE

Teacher, Grade 6
Ashby Elementary School
North Middlesex Region School District
Main Street, P.O. Box 127
Ashby, MA 01431-0127
(508) 386-5877

Nominator: Dr. Marsha R. Glynn
Principal

School Enrollment: K-6, 318

District Enrollment: 4,149



Caryl Adamowitch-LaPorte uses cooperative learning strategies effectively in her heterogeneous team teaching setting and also provides inservice training in cooperative learning for the Ashby Elementary School faculty and for the faculty in a neighboring district. Students in her classroom discover the joy of learning through hands-on, real life activities in all subjects including science, reading, language arts, and math. As her principal, Dr. Marsha Glynn, states in her letter of nomination, "Every one of her students is a scientist and each child meets success every day." In her classes students from all levels work together toward a common goal.

In addition, Ms. LaPorte has developed a literature-based reading program that employs group work and discussions. She is actively involved in working with other district sixth grade teachers in designing writing across the curriculum projects using computers.

Philosophy

I believe that all children, regardless of their background or ability, deserve to be exposed to a challenging, enriched curriculum and to an inspired teacher. My role as a teacher is to take students from where they are in the learning process, to set high but achievable goals for each student, and to provide exciting, thought-provoking experiences which enable them to meet these goals.

There are two underlying components to my teaching which I feel enable me to achieve these goals -- the use of cooperative group strategies and an emphasis on hands-on activities and experiences. . . . As the years have passed, I have become more and more committed to both approaches as I have witnessed children thriving, growing in self-confidence and becoming excited about learning. This became especially obvious when students entered my class after having previously experienced learning through [the sole focus] use of textbook and large group instruction -- students who wanted no part of

what school had to offer. Then I would marvel as those same children changed before my eyes.

[Students] who learn by doing, learn more, understand concepts better, retain information longer, and are better problem solvers. The use of hands-on activities is an excellent tool for dealing with the wide range of learning styles which exist in a classroom and . . . encourages students to become more responsible for their own learning. On a very basic level, it is also a lot more fun for everyone involved.

Program Description

My class is composed of twenty-three heterogeneously grouped sixth grade students who range in ability from [learning disabled] to talented and gifted. I teach reading, math, language arts, and science. I team teach with a fellow sixth grade teacher who is responsible for social studies instruction. I am also an Odyssey of the Mind coach.

Techniques Used To Teach Multilevel Groups

The use of cooperative groups involves structuring group activities in such a way that the task can only be accomplished through the combined efforts of all group members. The advantages to this technique are many: increased understanding and retention of concepts, more on-task behavior, better attitudes toward peers, improved self-esteem and motivation, and better accountability. Throughout all of this, cooperative grouping and hands-on activities play predominant roles. These two approaches are used regularly in each subject area.

Sample Lessons

I use a literature based reading program which revolves around several novels. . . . Small and large group discussions which emphasize higher level thinking skills form a foundation for the program. Also important are the numerous projects that are carried out in relation to the novels, such as artwork, model making, dramatics, debates, and writing.

The language arts program often overlaps with the reading program and is entirely process writing, with work on speaking skills as well. Students are continually writing, conferencing, revising, and sharing their work. Dramatics is a great tool for enhancing student confidence. Each year my class presents a play for Book Week in November. . . . [In June,] each student will have a speaking part as excerpts from six of Shakespeare's plays are presented "in the round."

My math instruction places an emphasis on problem-solving, the use of manipulatives, and real world application of math. Students maintain folders which hold brainteaser types of problem-solving work. Every Friday, math class focuses on an unusual problem-solving activity such as tessellations or probability.

Science class is almost exclusively activity oriented with most activities structured in groups. Students study motion, matter, rocks and minerals, geologic history, microscopic life, and environmental concerns. Students are often engaged in long term data collection. . . . Students have the opportunity to participate in a science club, and all will carry out an original science research project by the end of the year.

Evidence of Impact

A concluding activity for reading *The Pushcart War* was a debate on whether the pushcarts were justified in declaring war on the trucks. Students were divided into four debating teams of mixed ability levels and had to be prepared to defend either viewpoint. I will never forget [one] average ability student who amazed everyone as he pressed his team's point home in a perfectly formulated argument.

There is [also the example of one] mainstreamed resource room student who astounded the class with her perfect explanation of speed following a hands-on science activity . . . [two girls] who collaborated on a poem which won a local poetry contest . . . [One student] who took the initiative to write to *The Boston Globe* for the information needed to create the class's issue of Fun Pages . . . and [another] who now ventures to contribute to class discussions when before she would not.

Summary

As proud as I am of the success of my overall program, I am more proud of the individual academic and social successes which I see on a day-to-day basis in my students. By using the strategies of cooperative grouping and hands-on activities, each child, no matter how bright or mature, is able to experience success, which leads to increased self-confidence. There is continued growth in their risk-taking and in their positive attitude toward failure, as the cycle of learning really begins to move forward. And when my students get excited about learning, for me, it's the icing on the cake.

HARRIET BARNETT



Teacher, Grades 5-8, Spanish/Reading
Dobbs Ferry Middle School
Dobbs Ferry Union Free School District
505 Broadway
Dobbs Ferry, NY 10522
(914) 693-7640

Nominator: John O'Mahoney
Principal

School Enrollment: 204

District Enrollment: 1,025

Harriet Barnett has successfully taught many grade levels and believes whole heartedly that students must be actively involved in the teaching/learning process. Her teaching is based on communication and is carried out in an environment of student/teacher and student/student interaction. Harriet uses hands-on activities and cooperative learning strategies to establish a classroom climate that is positive and non-threatening -- one that encourages and supports the taking of risks. She has developed and participated in workshops designed to strengthen classroom management strategies, taught heterogeneously grouped students, and developed enthusiasm in her class.

Ms. Barnett presently teaches grades 5-8. For her 7th and 8th grade Spanish/Reading classes she has designed a unique program with the multiple focus of strengthening students' reading and study skills while exploring Spanish culture and language.

In addition to her teaching, Ms. Barnett also works with college students aspiring to be teachers and regularly works with teachers from other school systems in the Dobbs Ferry region interested in her exemplary program. She is an active member of the New York State Association of Foreign Language Teachers and uses this association to gain and share teaching strategies and insights with her colleagues. She is involved in a number of school and village committees and presently chairs the Dobbs Ferry Department of Recreation.

Philosophy

As Raymond Gerson, superintendent of schools for the Dobbs Ferry Union School District, states, "Teachers have the unique opportunity to affect not only the children they teach, but

those children's children. To this almost frightening responsibility, enormous skill, perception and wit must be addressed." Harriet Barnett's philosophy of teaching reflects this view. . . .

Helping someone else to learn is always rewarding, but inspiring someone to want to learn is truly a heady experience. . . . I don't believe there is a youngster who doesn't care. On the contrary, many children care so much that they are unwilling to try, for fear of failure. So "TRY" is the password in my classes. To try is to succeed.

A teacher's cognitive goals must be achievable by the student. They must be high but reasonable -- based on a clear-eyed assessment of each student's capabilities, interests, and work habits. . . . A student remains on the same plateau if he can only attempt the things he is already sure about; and without trial and error, no growth can take place. The teacher's attitude and the classroom atmosphere are prime factors in making a student comfortable enough to TRY. The student who is led to feel good about himself in a class will work hard to succeed so that he can continue to feel good.

. . . [T]he role of the teacher to encourage and facilitate . . . learning in all students, at all ability levels. The development of the entire child and an understanding of his place in the world is fully as important as his knowledge within a specific subject area. . . . As citizens of the world . . . I have taught my students to accept cultural differences as normal and interesting. . . . Waiting for our students outside the classroom is a real world composed of all kinds of people. Our classroom[s] must be a preparation for that world.

Program Description

[The 7th and 8th grade Spanish/Reading program] includes ALL students, even "At Risk Students." [The] objectives [of the course] are communicative proficiency, global understanding, development of self-esteem, social growth, and improvement of thinking skills.

Techniques Used To Teach Multilevel Groups

Students must be actively involved in the teaching process. While I . . . am always in control of the class, it is not always I who am teaching at all times. I structure our classes so that they often teach each other and practice together. . . . [The] atmosphere is one of cooperation rather than competition. Students of all abilities can and do work together so that all can accomplish more.

Sample Lessons

Students work in multi-ability groups to practice vocabulary and phrasing. They experiment with and polish their new skills to solidify learning, each taking responsibility for the others. Groups compare and contrast life in various cultures; they explore the Spanish culture through research reports, cooking, presentations, plays, and letter writing.

Groups develop games such as Wheel of Fortune, Concentration, and Bingo, to practice and teach each other questioning words, phrasing, and vocabulary. They plan simulated situations such as shopping trips through the markets of Spain where they must bargain for their purchases. Students research and prepare field trips for the class.

Success for All

New York State has a proficiency exam which entitles students who pass to receive one year of high school foreign language credit for work done prior to high school. Students do not have to take the exam. . . . I left the choice up to my 8th grade . . . students [and to] my amazement, ALL opted to take the exam, and all passed!

Summary

Ms. Barnett strives to keep her class active and involved. Her goal is that every youngster come away from the experience feeling a sense of pride and accomplishment. For some students, high ability as well as those needing extra attention, this may be the first successful mainstream experience they have had.

By providing activities that draw on multiple modalities and require a range of skills, the teacher makes sure that every student is challenged. Classroom management is the key. Students must have the social skills and the self-esteem to take responsibility for their own and others' learning, and the teacher must make sure that all lessons are carefully structured to allow for full student participation and growth. Like any new approach, teaching through cooperative group strategies requires a great deal of teacher time in the initial stages, but pays high dividends in the long run.

As Ms. Barnett attests, Students who read below grade level; who have physical and emotional problems; who are negative toward most things "educational" -- all have succeeded in my classes. I am proud when . . . visitors to my classes do not identify my learning-disabled or slow learning students. Together we have proven that, given encouragement, realistic (but stimulating) goals, and flexible and responsive teacher techniques, ALL students can successfully learn a foreign language.

LISA JENNINGS

Teacher, Grades 7-8, Life Science Curriculum
Mt. Greylock Regional High School
1781 Cold Spring Road
Williamstown, MA 01267
(413) 458-9582

Nominator: Howard Colter
Superintendent

School Enrollment: 774

District Enrollment: 774



Lisa Jennings leads her students to discover their world through their senses and to test and retest their observations. They master content and understand the scientific by "doing science." Ms. Jennings has taught science to mixed ability groups of all ages including YWCA Science Clubs, early childhood science programs for bilingual students, advanced high school courses, and life science courses for heterogeneously grouped seventh and eighth graders. She states, "As a teacher, and a teacher of science, I want to be sure that I have made science come alive for my students, but I also want learning to come alive too!"

Ms. Jennings uses cooperative learning strategies with her classes and emphasizes the importance of spending time at the beginning of each year building the social skills necessary to enable the whole class to work together as a team. All students become responsible for their own and their classmates' learning. "We are very comfortable and solid with each other as a class," shares Ms. Jennings.

Philosophy

I understand that there are many learning styles and I constantly adjust my teaching style to accommodate those differences. I set high standards for all students (both in content and process) while respecting and working with the different styles. I hold myself accountable for insuring that all students can master the concepts, skills, and content presented in the class, using hands-on, concrete approaches whenever possible. . . . I try to convey a sense of awe to my students -- I want them to feel that we are all privilege to some wondrous event when we [study the world around us.] I teach holistically -- that is, I try and insure that discrete units fit into and are part of the larger scheme of things. I [also] use any and all materials that I can beg, steal, borrow, or copy that work for my students. I remember how good it feels to know that none of us can answer all the questions -- it's how we think about finding out the answers that matters.

It is very difficult for a student not to succeed in a class where the subject being taught is approached from many different angles. I often think that my philosophy could be stated briefly in a comparison to joining together two pieces of wood: you can use glue, nails, screws, wooden joints, tape or clamps. Use whatever accomplishes the fit that you are trying to achieve. All students must feel comfortable and successful at some part of the unit.

Program Description

I . . . teach the life science curriculum to two 7th grade classes. I teach the 7th and 8th grade health classes, coordinate and teach the peer resource team class . . . and pilot a combined 7th and 8th grade science experiential course. My science classes are heterogeneous.

Techniques Used To Teach Multilevel Groups

I teach science in a way that comes naturally to almost every child. As toddlers we try to discover what our world is made up of and we use our senses to test and retest our observations.

In the beginning of the year, we work on those skills that enable the whole class to work together as a team. . . . I [then] assign each student to a study team. These teams usually have four or five members and contain one high achiever, two middle achievers, and one low achiever. I try to have a mix of both boys and girls on each study team. The teams give themselves a name and know that they are responsible to each of the teammates to help each other learn. . . . After we have worked on the topic (i.e. digestion) together, the teams will meet and make sure that their members know the vocabulary and concepts outlined by the worksheets. . . . At the end of the year, we have a big party honoring the top two teams with the highest averaged score.

I view the purpose of testing as providing a means for checking to see if I have been successful in organizing the class and presenting the material so that the skills and content are mastered.

Multilevel Groups at Work

This year we are studying all the major life processes and levels of organization within the body. We try to make connections between what we see physically in the bodies of the various animals that we have studied and what we know about evolution and the development of present organs. We are focused [at present] on the process of digestion -- both [the] physical and chemical breakdown of food. [Sample activities include:] dissecting a frog . . ., taking the digestive system and try[ing] to place and label each part . . .; draw[ing] the frog dissection from memory, labeling each part; . . . writing a story from the viewpoint of an organ in your digestive system (i.e. Greg Gallbladder -- a swell personality); or writing a letter to a fellow mad scientist describing what parts of the digestive system you could remove without killing your specimen.

[As part of the Experiential Science class], we decided to turn my prep room into a Live Library . . . , working cooperatively at gaining support from the administration to begin the project, acquiring the animals, advertising the library in the community, setting up a filing system to track animals borrowed and returned, [coping] with the birth and death [of animals], researching the care and feeding of the animals, writing Guides to Caring for Live Library Animals . . . so that the borrower would know how to care for the animal, writing a Live Library Newsletter to keep [the] school informed of new arrivals. . . . Some students have become entrepreneurs, interested in advertising and enlarging the library. Others . . . have become trouble shooters or "animal experts."

Other [Experiential Science] topics include: studying structures . . . ([the] winner so far has built a bridge that uses 250 [popsicle] sticks and holds 164 lbs.); making hydrogen, oxygen, and carbon dioxide; and game building using simple circuitry.

Summary

The students in Lisa Jennings's science classes explore and experiment. They have learned about electricity, pond life, pendulums, microscopic worlds, and molds. Together they have debated, built models, studied, laughed, and cried over the birth or death of a much loved pet, and in short, have become involved in and excited by the learning process. Her results have more than supported the concept that all students have something unique and worthwhile to bring to the classroom table.



MAUREEN KILBOURN

Teacher, Grades 9-12 English
Joel Barlow High School
100 Black Rock Turnpike
West Redding, CT 06896

Nominator: Nelson W. Quinby
Director of Secondary
Education

School Enrollment: 685

District Enrollment: 685

Maureen Kilbourn, a staff member of the Joel Barlow High School English Department, is a major influence in the design, establishment and implementation of the school's no-track English curriculum. A vocal opponent of tracking, Ms. Kilbourn helped lead the department toward a philosophy of heterogeneous grouping, employing strategies of collaborative learning to make it work. The untracked English curriculum was initiated in September 1989.

Ms. Kilbourn has extensive experience and training with process writing and collaborative and cooperative learning techniques, and has trained with cooperative learning researchers David and Roger Johnson. Her project, "Opening Pandora's Box," a collaborative research project combining the study of Homer's Odyssey and mythology, was included in the Connecticut 1989 Celebration of Excellence book of outstanding study projects. Business Week recently recognized her project, "Rebel Without a Cause: Cooperative Copy in a Timeless World," with its Innovative Teaching Award. In addition, Ms. Kilbourn helped establish and now codirects the school's Student Writing Resource Room. This writing laboratory was a long-time goal of the English Department, and its successful establishment, acceptance, and support by colleagues in all disciplines has brought them great satisfaction.

Philosophy

Understanding one's landscape is Maxine Greene's [term] for being conscious of our evolving experiences, for recognizing the ways in which we encounter the world, for knowing the background in which our original perceptions were developed. Acquiring the title of teacher is a pivotal point in my own landscape; it was done with clear direction, without equivocation, and with a steady heart. I have always wanted to be a teacher and from the beginning, I managed the rudiments of school and the profession with ease. It has been in the emergence of **becoming a teacher, in discovering that I am a teacher-learner, and that each student is a worker** that I have waged my longest struggle and achieved my greatest satisfaction.

[I believe that] the primary objective of education is "to lead out . . ." ultimately stimulating, encouraging, and supporting a person's search for meaning. It is the questions more than the answers that are the essence of education. Roles in this educational process, in this quest, include a student as worker and a teacher as learner, with these roles blending, exchanging, and combining as the participants move together toward coherence, synthesis, and a sense of wholeness while posing and addressing questions in the world around them.

It is the objective of the educator to enable others to learn how to learn. But if the educator remains personally involved in what can be a most demanding enterprise -- learning -- the students will be more readily caught up in the process as both teacher and student combine their sense-making efforts to understand the world around them. In order to participate in interactive learning, the teacher cannot consider her sense-making activities finalized; she cannot consider herself solely a transmitter of knowledge. A prevailing . . . attitude of explorer must [be] combine[d] with a confidence in her abilities to lead and to create. Along with the students, the teacher must be working toward full engagement. . . . Through their combined quest, students and teacher become initiated into the human community, in its fullest and most exciting sense.

The teacher must keep expectations for learning high. Students must be motivated to stretch themselves to their fullest potential. There must be room for confusion and . . . discomfort. . . . I believe strongly in multilevel classes for many reasons, one . . . being that it is too easy to have low-expectation levels in a slow class. I know what I want from myself and my students and I work relentlessly to achieve it. . . . When a class comes together as a cooperative unit, obviously caring for one another and enjoying their mutuality, I am rewarded. . . . Much of what happens in the close here and now will be forgotten, but if I gear students with a strong sense of self, with thinking and learning skills that will serve them in any situation, then I have fulfilled my goal as their teacher.

Program Description

Ms. Kilbourn teaches untracked English in grades 9-12, and is cochair of the Writing Committee and codirector of the Writing Resource Room, used by all grade levels.

Techniques Used To Teach Multilevel Groups

Since I believe the objective of education is to liberate each individual by engaging them in activities that will ground them in the necessary skills to be agents of learning, my collaborative, total group, and individualized lessons are designed with the students actively posing the questions, searching for possible solutions, and groping through the inherent confusions.

I strive to have each day be a new experience for my classes. Even though I am organized and distribute assignment sheets with the general schedule at the beginning of the week, I keep the element of surprise alive. There are carefully taught class routines that offer an overriding stability and allow me to be flexible without diminishing order.

When we play learning games, such as "Pictionary" with vocabulary words, or "King of the Hill" with S.A.T. preparation exercises, there is chaos with order because the class knows the rules; there is also a great deal of fun for all of us.

Sample Lessons

One specific lesson, "Opening Pandora's Box" [is] a collaborative research project combining the study of Homer's *Odyssey* and mythology. . . . Students are paired into teams, given a personal Pandora's Box (a shoe box) filled with a variety of challenges, such as "write an original myth explaining how snow came to be," "research and prepare a lesson that teaches the class all about Hercules," "find as many allusions to mythology as you can in newspapers, advertisements, etc.," and "find art work from any period that uses mythological themes." After two weeks in the Media Center working in teams with me guiding them in the research and organization of materials, the class joins in a Greek festival where they share their discoveries and celebrate their achievements. The final award . . . is a field trip to the Metropolitan Museum of Art with a tour emphasizing the Roman and Greek art collection as well as works that express ancient themes.

My project, "Rebel with a Cause: Cooperative Copy in a Timeless World," . . . [is] designed to include all levels of students with all types of talents working in teams of two or three. . . . [T]his creative research writing project . . . challenge[s] students to examine their perceptions of the media while gaining new perspectives on the rebel in society. Collaborative effort, creative thinking, and cognitive skills are emphasized. . . .

Using the Media Center as the work base, students must first organize their group, . . . search for an interesting topic, and plan a time line. . . . Each group selects a rebel, fictional or otherwise, from any period in history to research. Simultaneously, each group selects a media form, such as "People" magazine, National Public Radio's "All Things Considered," or NBC News to research and use as a vehicle to report not only on their rebel but also on the rebel studied in class (in our case, *Antigone*).

They must move the media form to the time period of the researched rebel and then they must move *Antigone* into that same time period, making appropriate, creative adjustments so that her quandary . . . makes sense in this different time period. Using the accumulated information, students must then design the final copy for either publication or production and present it to the class. Display cases show off the completed newspapers and magazines; the school's cafeteria monitor features the video programs.

Summary

Although learning is a quest, a discovery, it cannot be accomplished without high standards, specific skills, and solid content. Education must include the teaching of the foundations for learning as well as the creation of space for the posing of new questions. . . . Focus must be on the student as worker, as active learner, and never directed at the ego of the teacher.

SHERYL PETERSON

Teacher, Grade 7 Geography and
Grade 8 Social Studies
Middlebrook School
131 School Road
Wilton, CT 06897
(203) 762-8388

Nominator: Robert Shook
Principal

School Enrollment: 375

District Enrollment: 2,500



Sheryl Peterson employs a cooperative learning approach to multilevel grouping in her classroom. The caliber of her work is such that one of her units was submitted to the Celebration of Excellence Program in Connecticut.

Ms. Peterson has taken the Johnson cooperative learning program. She has successfully trained, and is continuing to train her colleagues in the Wilton school system in cooperative learning theory and strategies. She has also put on demonstration lessons for her colleagues, and makes herself available to anyone in the school system to observe her classes. And as her reputation as an excellent, talented teacher of multilevel groups has spread, she has conducted training sessions for and hosted visitors from school systems near and far.

Philosophy

I truly believe that all students are special and each has a unique ability to contribute in our society. In order to become a contributing member, however, each student must leave school with high self-esteem, basic learning skills, a body of knowledge, and well developed social interaction skills. To accomplish this goal, children must have ownership of their learning, and they need to learn how to work and play effectively with each other. They must have a stake in each other's well being.

... [I]t is crucial for them to realize that differences are positive and that a cross section of ideas is enlightening. Therefore, my classroom is student centered where children are actively involved in the learning process . . . , knowledge is joyfully shared not possessed, and . . . students receive the support necessary to enable them to work at the edge of their ability. As I believe students learn more through effective use of conflict, not its avoidance, social skills are directly taught, monitored, and processed.

Program Description

Ms. Peterson teaches 7th grade geography and 8th grade social studies. All classes are heterogeneous. She has divided the curriculum into interdisciplinary units with titles such as "Religions of the World," "Festival of Colonial America," "East Meets West," "Journey of Discovery," and "Wars of America."

Techniques Used To Teach Multilevel Groups

Learning in my class is achieved through heterogeneous grouping in project-based activities. I like to think of my classroom as a truly cooperative one, and I have made extensive use of the Johnson model for cooperative learning. However, to insure the participation of all my students, I frequently refer to my Teacher Expectation and Student Achievement (TESA) training and view the TESA concept as a practical reinforcement of my previously stated belief that all children are special and each has a unique ability to contribute.

As nominating principal, Robert Shook, says, "Students are grouped heterogeneously for all cooperative activities in the classroom. This heterogeneity not only has as its core low, medium, and high level students, but also considers personality differences. At the informal level students are placed in pairs and 'put their heads together' to discuss homework, reading assignments, quiz preparation, new information, and lecture material. Use of the formal group occurs with every project based activity in both grades 7 and grade 8. In these projects students are selectively placed in groups with three to six students per group. The academic goals are established and individual accountability to the group is clearly defined.

"The vital components to the success of a cooperative team [are] the special skills they employ. These skills are directly taught by the teacher, maintained on an ongoing basis, and then processed by the students and the teacher. These social skills train students how to interact with each other, appreciate differences and help each other learn."

Cooperative Learning in Action

The power of this approach to classroom learning became clearly evident to me as a result of a personal teaching experience I had a few years ago. My task, for my 7th grade World Geography classes, was to teach the concept of longitude and latitude. I approached the first class with a teacher-directed, lecture-style method and painfully attempted to both generate questions and engender understanding. The results were disappointing. Discouraged, but undaunted, I switch gears. When the second class arrived, I quickly placed them in groups, gave them a longitude/latitude problem to solve and watched the class come alive! Questions poured from each group, success was readily observable and the desire to help each other find the way was remarkable!

Excitement for academic learning is not the only success I have witnessed with multilevel grouping. I have seen frustrations surface and be resolved. "C," who is a special education student and very reluctant to participate . . . had been working with two high achievers At one point he turned to them and said, "Look, stop this! I'm

angry!" When questioned by his partners about his behavior, he said that they were talking too fast, he couldn't follow their ideas, and he had something to say too. They solved their problem by asking "C" to explain what he needed, how they could help him understand it better, and what he thought. The relationship that developed from this point on was much more positive and all three students grew in the process.

Sample Lessons

In all my projects students read, research, write and orally express their ideas. I try to incorporate into each unit a component which calls for free expression and creative thinking. For example, my 7th grade students, in a project titled "Close Encounters of the Third World," research problems faced by third world countries, graph their findings, and write an analysis of their research. The culmination of this project is a mock world conference in which students, in committees, present their findings, predict the implications for the world community, and finally, propose possible solutions.

In another 7th grade unit, students enter into a "Journey of Discovery" where they find they have crash landed in a foreign country. They soon discover that others have also experienced this fate and they form a team. The goal of the team is to reach the capital city and, in the process, gain a full understanding of the geography, the government, and the culture of the country. Although students individually have specific responsibilities, it is the integration and coordination of these individual efforts that is the key to the team's success.

In the [8th grade] "Wars of America" unit, many social skills are taught and these become a fundamental part of this project. The unit is designed to teach students about one aspect of conflict in American history, namely military conflict. Students are placed in "war groups" and through a series of jigsaw techniques move in and out of their groups both as learners and as experts. Students are heterogeneously placed in these war groups and consistently work with a partner for support. Their group interaction helps to build a body of knowledge and the skill base necessary to analyze this knowledge and draw conclusions.

Summary

The sharing of ideas, experience, and understanding among students of different abilities invariably has the wonderful result of generating new ideas and better understanding From my perspective, multilevel grouping in a cooperative classroom has proven to be a very exciting way to teach. The personalities, strengths and weaknesses of individual students emerge and all students grow in the process. . . . Interdisciplinary units are an aid in multilevel grouping and add a new dimension both to the projects and the students' overall learning experience. Project-based, student-centered activity with heterogeneous grouping, in a cooperative setting, helps all students in the class learn more, . . . and enjoy the process.

CAROL SMITH



Teacher, Grades 4-8, Alpha Program
Shelburne Middle School
Harbor Road
Shelburne, VT 05482
(802) 985-3331

Nominator: John F. Rinaldi
Assistant Superintendent

School Enrollment: 300 (Alpha Program-80)

District Enrollment: 2,800

The Alpha Program is an educational alternative within the Shelburne Middle School that has been in existence since 1972. It is a multi-age classroom, consisting of grades 4-8, and is founded on the premise that all subject areas are interdependent and should be integrated to provide a comprehensive education. It is the belief of the teachers in the Alpha Program that initiative, responsibility, and independence are learned skills that are best taught through direct experience and interaction in the classroom. They also believe that the unique needs of the early adolescent learner are best addressed in a multi-aged environment.

Ms. Smith has been instrumental in guiding the program since 1975. Through Carol Smith's expertise, the Alpha Program has grown to the point where it is chosen by nearly 25% of the district's families as the educational delivery method for their children. In addition, activities and teaching methods traditionally attributed to the Alpha Program are now being tried school-wide. It has also served as a model for other alternative middle school programs throughout Vermont. As the middle school movement takes hold in Shelburne, colleagues from outside the program are looking to the program and its staff for direction and consultation.

Ms. Smith has been active in professional organizations at the local, state and national level. She is published in the Vermont Association of Middle Level Education Journal, and with a coauthor is currently writing a book on interdisciplinary teaching in the middle grades. She has also taught courses related to interdisciplinary teaching at the college level.

Philosophy

My personal educational philosophy and the philosophy of the Alpha Program are one and the same. . . . [We believe] that early adolescence is a time of rapid change and growth. It is a time when children can benefit from the opportunity to explore their intellectual, social and emotional potential in a setting which fosters such exploration.

We have . . . a philosophical commitment to initiative, self-reliance and team work. . . . We further believe that the unique needs of the early adolescent learner are best addressed in a multi-aged environment that provides opportunity for children to grow intellectually, socially, and emotionally at their own pace, while developing important interpersonal skills. We believe that students and teachers are partners in learning and must participate together in the learning process, establishing programs and setting goals that best reflect the needs and interests of each individual.

Program Description

The Alpha Program includes grades 4-8 and is staffed by four full-time teachers. The projected enrollment for the 1990-91 school year is 100 students and another teacher may be added. . . . The program is founded on the premise that all subject areas are interdependent and should be integrated to provide a comprehensive education. The program is child centered. It is a schooling experience based on what we know about how children "in the middle" learn. We have a specialized understanding of child development and a philosophical commitment to initiative, self-reliance, and team work.

We believe that student skills and knowledge are best enhanced through applied inquiry. We combine aspects of the sciences, social studies, language arts, mathematics, and the arts throughout our day, realizing that these disciplines can not be compartmentalized if children are to acquire ability through real opportunities of practice and use.

[As noted in the brochure,] "Each student progresses at his/her own pace, according to a personalized plan which the student and teacher have agreed focuses on the individual needs of the student. The student pursues special interests and sets individual goals, meeting accepted middle school standards for achievement in the skills necessary to be a well prepared participant in today's complex world.

"At the same time, each student is a valued member of the group, participating in his/her own way in activities which will benefit the whole group. Whether two student work together on a research project and present their results to the rest of the class, or the whole class reaches a consensus on the destination for the annual camping trip, it is a learning experience."

Research Results from Program Evaluation

I discovered that the very premises on which the Alpha Program was founded, did, in fact, have significant and positive impact on the children (and the parents) who participated in the program. . . . Parents and students identified the same three aspects of the program as having the most significant impact on growth:

- Multi-age environment: Parents said this lends an atmosphere of family and provides children with role models. It allows children to move inconspicuously from role to role as they try out who they are and how they fit. Students said it allowed them to learn from a variety of ages, interact with a variety of ages, and listen to other people's point of view.

- Independence: Parents said the opportunity for students to actively participate in their learning was essential. They said that individual scheduling and planning taught responsibility and time management. Students said learning to make decisions related to their education and accepting and learning from the consequences of those decisions was most important.
- Teacher/student relationships: Parents said that strong student/teacher relationships promoted respect and the opportunity for long-lasting friendships. These long-term relationships allowed teachers to be especially attentive to adolescent needs. Students said building strong relationships with teachers gave them a continuity they could count on and fostered an attitude of mutual trust and respect.

Areas of concern . . . were: isolation of Alpha students and teachers from the general middle school population, a lack of information available about the program for the community, and the lack of formal science courses presented in the program. [These issues have either been resolved or are currently being addressed.]

Summary

In 1972 Shelburne provided a classroom for a few students whose parents were willing to take a risk by moving them from the traditional middle school program to a creative alternative. It was the vision of three teachers. Carol Smith was at the heart of that vision. As Susan Kuntz, director of graduate programs at Saint Michael's College writes, "Today the concepts that were the etiology of the Alpha Program are seen in all aspects of the Shelburne Middle School -- multi-age groupings, interest level programs, and interdisciplinary teaching. . . . By building self-esteem through praise, critical comments, and the pervasive attitude that students have inner resources to solve most of the problems presented to them [Carol Smith] has empowered students to find the answers. They are better citizens for [her] actions."

1990-1991 Teacher Recognition Program Finalists

This year's Laboratory Fellow selection process was especially difficult. The many portfolios we received contained excellent teaching strategies created by exceptional teachers.

Below we list this year's Finalists whose quality work also deserves recognition and usage. We invite you to contact these teachers as well as those profiled in the previous pages to discuss their outstanding classroom programs.

**James Adair
Amy Hinkle
Judy Lazina**

**Northern Catskill Alternative School
A.P.P.L.E.
P.O. Box 26
Grand Gorge, NY 12434
(607) 588-6420**

The Alternative School is a BOCES program designed to help at-risk youth in grades 7-12 from ten school districts. Mr. Adair teaches mathematics and science in grades 7-11; Ms. Hinkle teaches remedial subjects and interprets for a college-bound deaf student; and Ms. Lazina teaches English and social studies in grades 7-12. All three teach interdisciplinary units and use peer tutoring and cooperative learning strategies as mainstays of the program.

**Irene Crane
Robert Littlefield**

**Doherty Middle School
36 Bartlett Street
Andover, MA 01810
(508) 470-1700**

Irene Crane and Robert Littlefield worked together to plan an event celebrating the coming of spring titled "Special Multilevel Paideia Days at the Middle School." In preparation for the event the students engaged in individual investigations, coaching, art interpretation, and student led seminars.

**Donald Hagberg
Raymond Shepardson**

**Monument Mt. Regional High School
Route 7
Great Barrington, MA 01230
(413) 528-3346**

Donald Hagberg is a member of the Social Studies Department and Raymond Shepardson is a member of the Science Department at Monument Mt. Regional High School. The two collaborated to create the "Man and His Environment Program" at the high school. It is an interdisciplinary, hands-on, outdoor, natural science course. The course is team taught to a heterogeneously grouped class and designed to emphasize cooperation, discovery, team building, and self-esteem.

Ward Jarman

**Crosby Jr. High School
Church Street
Belfast, ME 04915
(207) 338-3320**

Ward Jarman is a resource room teacher at Crosby Jr. High School. He believes in "holistic teaching" and cites Mark Twain's warning: "Don't let your schooling interfere with your education." Mr. Jarman has developed a writing program designed to build on the student's current knowledge while fostering creativity and building self-esteem.

Ruth Nardella

**George Grant Mason Elementary School
Tuxedo UFSD
Tuxedo Park, NY 10987
(914) 351-4786**

Ruth Nardella is a member of a teaching team and teaches sixth grade reading, English, spelling, and health. She follows the philosophy that every child has the ability to learn and should be given the opportunity to learn according to his or her ability. Students in her class have worked together to produce a number of award winning essays.

John Powers

**Joel Barlow High School
100 Black Rock Turnpike
West Redding, CT 06896
(203) 938-2508**

John Powers is a member of the English Department and codirector of the Writing Resource Room at Joel Barlow High School. He believes that students learn more in school than the academic curriculum and learn from others besides the teacher. When they learn to work in groups, students develop social skills and a sense of self as well as a sense of their place in the world.

James Redmond

**Andover West Middle School
Shawsheen Road
Andover, MA 01810
(508) 470-1700**

James Redmond is a sixth grade teacher at the Andover West Middle School. He has had extensive training in 4MAT, a systematic approach to teaching students with different learning styles. All units Mr. Redmond develops include activities for children who are thinkers, children who are doers, children who deal well with abstracts, and those who thrive with concrete tasks. He incorporates Paideia seminars, wait time, brainstorming and cooperative learning into all lesson plans.

Norena Zanleoni

**St. Albans City Elementary School
Bellows Street
St. Albans, VT 05478
(802) 527-0565**

Norena Zanleoni is a K-8 physical education teacher. She works hard to build a spirit of cooperation and team work in her students. The students are challenged to grow through personal achievement and shared experience. She states, "Should you walk into my classes you will hear children encouraging each other to strive."

Improving education is a challenging task, but not an impossible one. It requires the energy, commitment, and cooperation of many people who share a vision and a plan to make change happen.

For The Regional Laboratory, the classroom is the core of educational improvement: our goal is better student learning. Around that core are the educators and policymakers of our region. With them we strive to give teachers and administrators resources, like the **Outstanding Teaching Practices Series**, to enrich the quality of education in the Northeast United States and its Caribbean jurisdictions.

The Regional Laboratory provides a link between research and the classroom. One of our major goals is providing clients with information about research knowledge, proven practices, and new policy initiatives. Our efforts concentrate on serving at-risk youth, teacher development, restructuring education, and linking policymaking to educational R&D and practice.

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For information about The Regional Laboratory, our products, and services, write or call

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END

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